

Rebuilding Together Impact Measurement Pilot 2019



A Rebuilding Together Southeast Michigan team rebuilding a home in Detroit in September 2019.

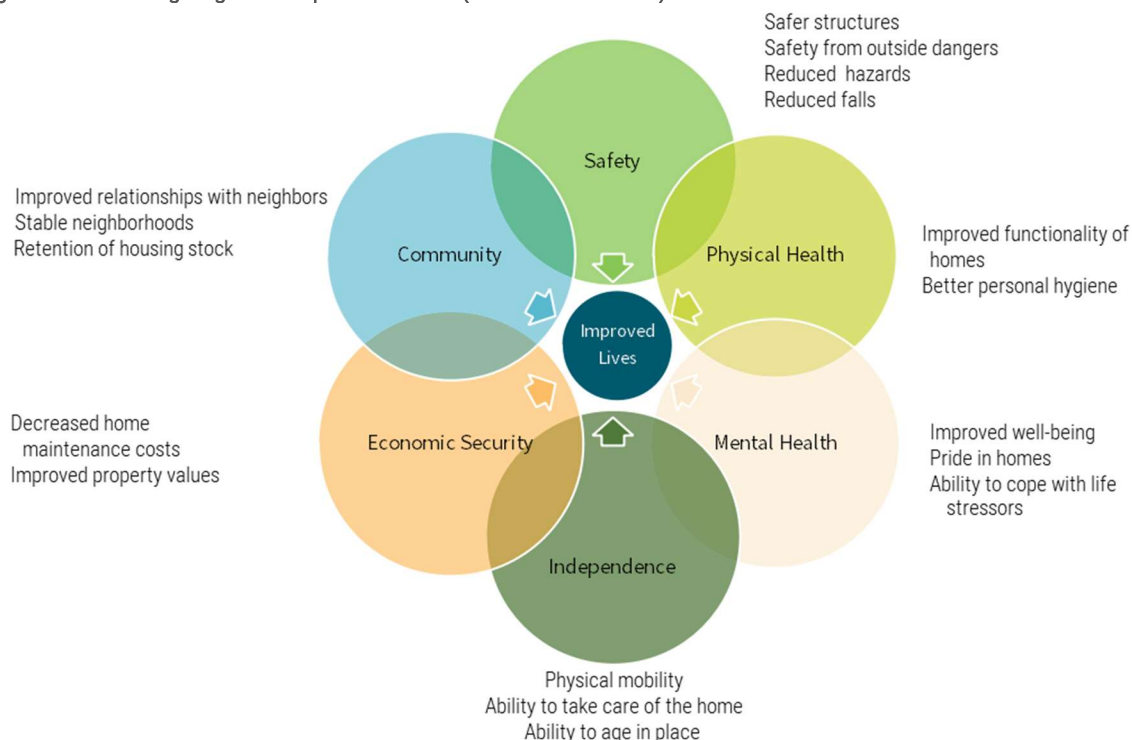
Rebuilding Together Southeast Michigan Affiliate Impact Brief



Executive Summary

Rebuilding Together Southeast Michigan (RTSEM) participated in the Rebuilding Together national impact measurement pilot in 2019-2020. The Rebuilding Together pilot project measured six key areas of impact: safety (including fall prevention), physical health (including respiratory health, which can be affected by moisture in the home), mental health, independence, economic security, and community.

Figure 1. Rebuilding Together Impact Domains (Desired Outcomes)



In general, RTSEM contributed to improvements in all of the impact domains among the homeowners it served, including the following:

- Increased safety and independence (easier entry/exit, accessibility modifications)
- Improved physical health (self-reported; repairs reduced moisture and allergens)
- Improved mental health (reported reduced stress, improved coping, increased happiness, pride)
- Greater long-term economic security (perceived value of home as an asset)

For additional key findings, see pages 11-12 of this report.

Rebuilding Together Impact Measurement Pilot

In 2019, Rebuilding Together launched a pilot project designed to bring greater rigor and consistency to how it measures the community impact of the repair work done by its affiliates nationwide. The project focused on the following research questions:

- To what extent are the lives of low-income homeowners and their families improved as a result of affiliates' work?
- To what extent are communities improved as a result of affiliates' work?

Rebuilding Together Southeast Michigan (RTSEM) was one of five affiliates that participated in the impact measurement pilot.¹ RTSEM, the other affiliates, and Rebuilding Together's national office worked with the consulting firm Actionable Insights, LLC, to adapt and test a retrospective pre-/post-survey² to gauge the effects of affiliate home repairs on their respective homeowners. Actionable Insights trained pilot affiliate personnel and AmeriCorps members on methods for administering the survey by mail as well as conducting follow-up phone interviews.

RTSEM and the other affiliates entered the survey data they collected into a SurveyMonkey form created by Actionable Insights, including a unique identification number for each project. Actionable Insights merged the survey data with matching demographic data and analyzed the information for this affiliate impact brief, which also includes results from RTSEM's Healthy Housing Checklist.³ The impact measurement pilot data reflects home repair projects completed between March 1 and July 31, 2019.

Southeast Michigan Programs

With a focus on preventive health and safety, and long-term improvements to quality of life, Rebuilding Together Southeast Michigan (RTSEM) repairs homes and revitalizes communities through three core programs:

1. **National Rebuilding Day:** Since 1992, RTSEM has partnered with community sponsors to offer repair services for approximately 25 low-income homeowners each spring. National Rebuilding Day is supported locally by approximately 400 volunteers.
2. **Rebuild Day Projects:** Since 2015, RTSEM has engaged in repair projects throughout the year with sponsoring community partners to engage local volunteers in team-building opportunities. RTSEM takes on approximately 20 such projects annually.
3. **Minor Home Repair Program:** Since 2015, RTSEM has provided homeowners with non-emergency repairs that can be completed by a team of three to four volunteers in less than four hours for under \$500. When funded, the program handles approximately 40 repairs a year.

Southeast Michigan Projects

PILOT IMPACT MEASUREMENT

RTSEM completed 24 home-repair projects between March 1 and July 31, 2019. Surveys were mailed to all 24 households, and telephone follow-ups were conducted with priority projects. (For survey response rates and results, see page 6.) For survey purposes, RTSEM defined priority projects as those for which:

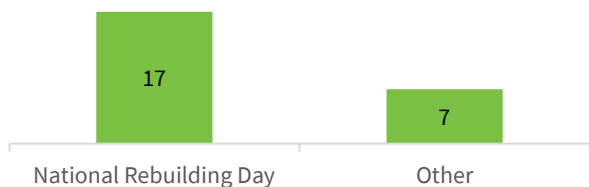
- at least 10 volunteers were engaged, and/or
- at least \$2,500 was invested in the project.

¹ The other affiliates were Baltimore, San Francisco, Seattle, and Southern Nevada.

² Survey based on 2015 Rebuilding Together AmeriCorps survey created by McMahon Consulting Group, LLC.

³ Due to time constraints, Healthy Housing Checklist data were not merged with impact survey data for this pilot, but will be in the future.

Figure 2. Number of Households by Program, Pilot



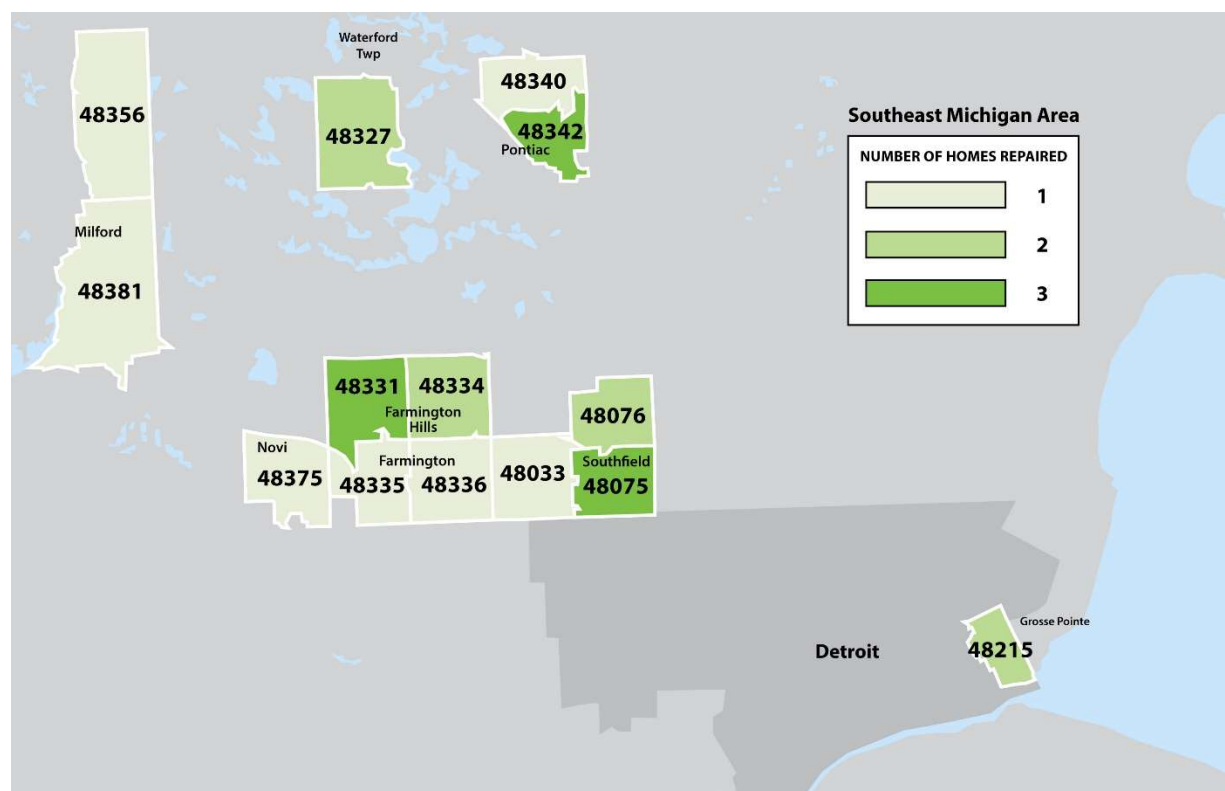
Note: N=24.

The majority (71%) of RTSEM households served during the five-month pilot period received home repairs on National Rebuilding Day in April. The remainder benefitted from other programs. All projects involved single-family homes.

PILOT HOME LOCATIONS

RTSEM serves Oakland County, Michigan, and City Council District 4 in Detroit. The locations of projects completed during the impact measurement pilot appear on the map (Figure 3).

Figure 3. Number of Homes Repaired, March 1-July 31, 2019



PILOT DEMOGRAPHICS

Almost all households served by RTSEM are low-income. RTSEM bases “low income” on the U.S. Department of Housing and Urban Development’s definition, which considers a household’s size (number of occupants) and earnings (percentage of the area’s median income). In 2019, a two-person household in Oakland and Wayne Counties was considered low-income if its occupants together earned \$48,850 or less (Table 1).

Table 1. Income Categories, 2019

Category	Income Limit for a Two-Person Household, Oakland and Wayne Counties	% of Area Median Income (AMI) ⁴
Moderate income⁵	\$73,320	81–120% of AMI
Low-income	\$48,850	51–80% of AMI
Very low-income	\$30,550	31–50% of AMI
Extremely low-income	\$18,350	30% or less of AMI

Source: U.S. Department of Housing and Urban Development

Figures 4 and 5 show the distribution of RTSEM’s households served by income category and age range, for projects completed during the pilot impact survey timeframe. Nearly 30% of RTSEM’s households served were extremely low income. Almost half (48%) of all household members were adults age 65 or older, and 46% of homes had at least one older adult occupant. About one in five households (21%) had at least one child resident.

Figure 4. Household Income Level

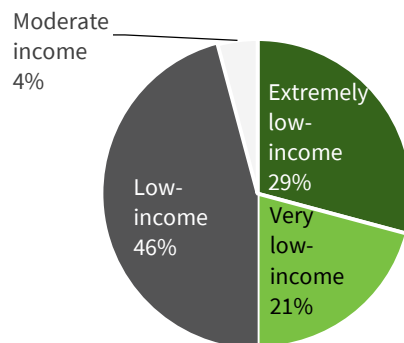
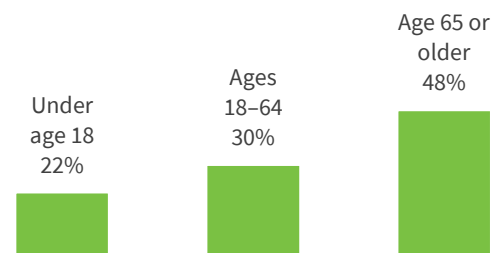


Figure 5. Household Member Ages



Note: N=24 households.

More than half of all households (54%) included a resident with disabilities, and nearly three quarters (71%) of the homes were owned by women. Additional demographics are shown in charts 6 and 7.

Figure 6. Homeowner Race/Ethnicity⁶



Note: N=8. Ethnicity data not available for many homeowners.

⁴ AMI for a two-person household calculated by doubling the very low-income limit, which is 50% of AMI.

⁵ Moderate income limit calculated by multiplying AMI by 1.20 (i.e., 120%).

⁶ Individuals who identified both as Hispanic/Latinx and another ethnicity were treated as multi-ethnic for the purposes of these statistics.

Figure 7. Other Characteristics



Note: N=24 households.

Program Evaluation Results by Area of Impact

IMPACT MEASUREMENT SURVEY RESULTS

The statistics in this section reflect the results of the pilot impact measurement survey. The survey respondents were low-income homeowners for whom RTSEM completed repairs between March 1 and July 31, 2019. Sixty seven percent of homeowners served responded to the survey (16 of 24 homeowners).⁷

Table 2. Impact Survey Results, Pre-/Post- Comparisons

Indicator (N=Number of Respondents)	Average Pre-Score (Retro-spective)	Average Post-Score	Average Change (Proportional Increase) Effect Size **
Pride in property (N=16) (1=Not proud at all, 5=Very proud)	2.94	4.50*	1.56 points (+53%) Effect Size: 95%
Value of home as family financial asset (N=16) (1=Not valuable at all, 5=Very valuable)	3.19	4.44*	1.25 points (+39%) Effect Size: 88%
Frequency of stress about home maintenance (N=16) (1=Always/almost always, 5=Never/almost never)	2.38	3.94*	1.56 points (+66%) Effect Size: 81%
Ease of entrance/exit (N=16) (1=Very difficult, 5=Very easy)	3.75	4.88*	1.13 points (+30%) Effect Size: 78%
Frequency of feeling happy (N=16) (1=Never/almost never, 5=Always/almost always)	4.06	4.81*	0.75 point (+18%) Effect Size: 77%
Confidence in coping with life stressors (N=16) (1=Not confident at all, 5=Very confident)	3.56	4.50*	0.94 point (+26%) Effect Size: 76%

⁷ 81% of homeowner surveys were completed by mail.

Indicator (N=Number of Respondents)	Average Pre-Score (Retro-spective)	Average Post-Score	Average Change (Proportional Increase) Effect Size **
Ease of bathing (N=15) (1=Very difficult, 5=Very easy)	3.40	4.60*	1.20 points (+35%) Effect Size: 75%
Feeling of connection with neighbors (N=16) (1=Not connected at all, 5=Very well-connected)	3.63	4.06*	0.44 point (+12%) Effect Size: 73%
Ease of cooking (N=14) (1=Very difficult, 5=Very easy)	4.07	4.57	0.50 point (+12%) Effect Size: 70%
Physical health (N=16) (1=Very bad, 5=Very good)	3.50	3.75	0.25 point (+7%) Effect Size: 63%
Length of time plan to stay in home (N=12) (1=Less than five years, 3=As long as possible/rest of my life)	2.83	2.92	0.83 point (+29%) Effect Size: 61%
Ability to pay for daily necessities (N=16) (1=Not able to pay, 4=Comfortably able to pay, and more)	2.38	2.44	0.06 point (+3%) Effect Size: 54%

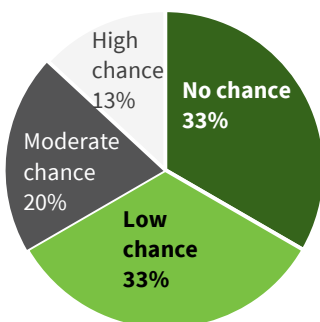
* Pre- to post- change is statistically significant ($p < .05$) and positive, based on Wilcoxon signed rank tests.

** Common Language effect size statistics may be read as the likelihood that a homeowner reported a higher rating after repairs were completed, compared to before.

Additional Results:

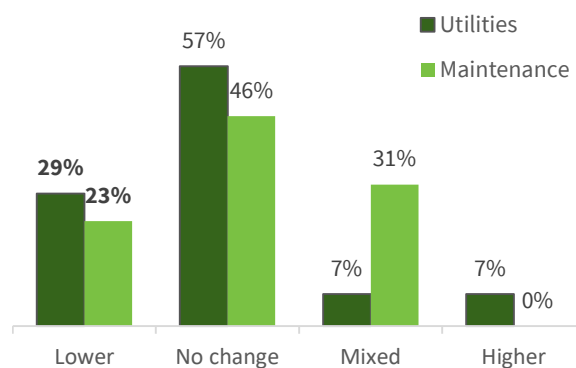
- 43% of respondents said they plan to pass their property along to a younger relative or friend (N=7).
- 19% of respondents said they had fallen at least once in the six months prior to repairs, and 13% said they almost fell (had a close call); after repairs were made, nearly two thirds (66%) of all respondents felt they had a “low chance” or “no chance” of falling (N=16 pre-, 15 post-).

Figure 8. Likelihood of Falling After Repairs



Note: Percentages may not add to 100 due to rounding.

Figure 9. Change in Costs After Repairs



- Nearly one quarter (23%) of respondents said their maintenance costs had decreased since RTSEM had completed repairs. None reported an increase in costs (N=13). When asked about utilities (e.g., water, energy), 29% indicated their costs were lower after repairs, while 7% said their costs were higher (N=14).⁸

HEALTHY HOUSING CHECKLIST RESULTS

The statistics in this section reflect the results of the pre-/post-Healthy Housing Checklist, which is administered by RTSEM directly. The results are for the 19 projects for which RTSEM completed repairs between September 1, 2018 and August 31, 2019.⁹

Table 3. Healthy Housing Checklist Results, Pre-/Post- Comparisons

Indicator (N=Number of Properties)	Households Complete, Pre-	Households Complete, Post-	Percentage Point Change (Proportional Increase) <i>Effect Size **</i>
No known electrical hazards are present, and kitchens and baths have GFCIs. (N=19)	21%	74%*	53 points (+252%) Effect Size: 85%
Stairs and steps have secure handrails that meet occupants' needs. (N=19)	26%	74%*	48 points (+185%) Effect Size: 82%
Modifications to toilets and tubs assist those who need help using the toilet or bathing. (N=19)	37%	79%*	42 points (+114%) Effect Size: 80%
Interior paint and wall covering is intact. (N=19)	37%	74%*	37 points (+100%) Effect Size: 77%
Grab bars are strategically placed for those at risk of falls. (N=19)	26%	63%*	37 points (+142%) Effect Size: 77%
The homeowner has access to a working water heater, refrigerator, and range. (N=19)	58%	95%*	37 points (+64%) Effect Size: 77%
Rainwater is effectively shed and directed away from the structure. (N=19)	32%	68%*	36 points (+113%) Effect Size: 77%
Exterior walls have no gaps, cracks, or holes larger than 1/8 inch. (N=19)	53%	89%*	36 points (+68%) Effect Size: 77%

⁸ The increase in utility costs may be the result of homeowners resuming the use of appliances (e.g., water heater, range, refrigerator, sink) that were previously broken, a difference in weather from the prior year, utility rate hikes, lack of weather-stripping or energy-efficient appliances, or an increase in the number of household members, among other possibilities.

⁹ For the pilot, Healthy Housing Checklist data were not intended to be matched with impact survey data; thus, the period for the pilot checklist data is not the same as the impact window. The evaluation of the first full year of impact data (2020–2021) will include matched checklist data.

Indicator (N=Number of Properties)	Households Complete, Pre-	Households Complete, Post-	Percentage Point Change (Proportional Increase) <i>Effect Size**</i>
A currently dated Class ABC fire extinguisher is available in or near the kitchen. (N=19)	26%	53%	27 points (+104%) Effect Size: 72%
A working smoke detector is on each floor and in or near each bedroom to meet code. (N=19)	47%	74%	27 points (+57%) Effect Size: 72%
The home is free of active water leaks and serious moisture problems. (N=19)	37%	63%	26 points (+70%) Effect Size: 72%
The homeowner has safe entrance to and exit from the home. (N=19)	74%	100%	26 points (+35%) Effect Size: 72%
The roof is watertight. (N=19)	53%	74%	21 points (+40%) Effect Size: 69%
A working CO detector protects homes with combustion appliances or attached garage. (N=19)	58%	79%	21 points (+36%) Effect Size: 69%
The numerals in the property's street address are clearly visible from the street. (N=19)	68%	89%	21 points (+31%) Effect Size: 69%
Main rooms and stairs are free of tripping hazards. (N=19)	68%	84%	16 points (+24%) Effect Size: 66%
Old, worn carpeting has been replaced, preferably with durable flooring. (N=19)	53%	63%	10 points (+19%) Effect Size: 63%
Window and exterior doors open effectively, close and lock securely, and seal well. (N=19)	53%	63%	10 points (+19%) Effect Size: 63%
The kitchen and bathrooms have an exhaust fan vented outside. (N=19)	53%	63%	10 points (+19%) Effect Size: 63%
Water heaters, furnaces, and space heaters that produce CO exhaust outside. (N=19)	84%	95%	11 points (+13%) Effect Size: 63%
The homeowner has access to a working sink, toilet, and bathtub or shower. (N=19)	79%	89%	10 points (+13%) Effect Size: 63%

Indicator (N=Number of Properties)	Households Complete, Pre-	Households Complete, Post-	Percentage Point Change (Proportional Increase) <i>Effect Size**</i>
The homeowner can maintain the interior temperature in a comfortable range. (N=19)	58%	63%	5 points (+9%) Effect Size: 59%
The clothes dryer, if present, vents outside with metal duct and unobstructed airflow. (N=19)	79%	84%	5 points (+6%) Effect Size: 59%
The home is free of live infestation of pests, and sources of attraction are removed. (N=19)	79%	84%	5 points (+6%) Effect Size: 59%
Main rooms and stairs have adequate lighting for occupants to move about safely. (N=19)	79%	84%	5 points (+6%) Effect Size: 59%

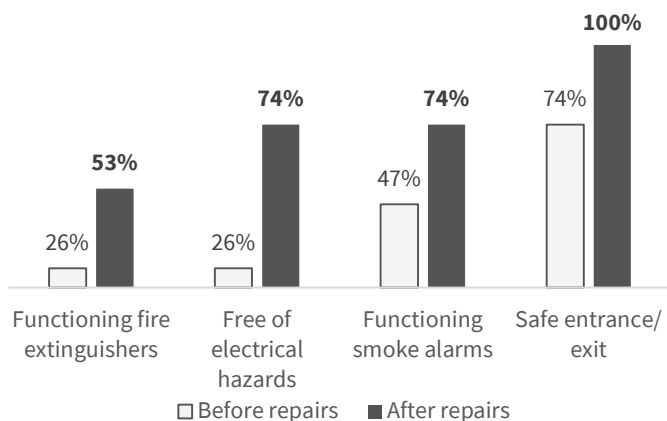
* Pre- to post- change is statistically significant ($p < .05$) and positive based on McNemar change tests.

** These Common Language effect size statistics should be read as the likelihood that a home received a given repair or modification.

Key Findings

The Rebuilding Together pilot project measured six key areas of impact: safety, physical health (including fall prevention and respiratory health, which can be affected by moisture in the home), mental health, independence, economic security, and community. The work done by RTSEM resulted in many positive outcomes, even though its ability to make improvements relied on available resources and homeowner willingness to proceed with repairs.

SAFETY



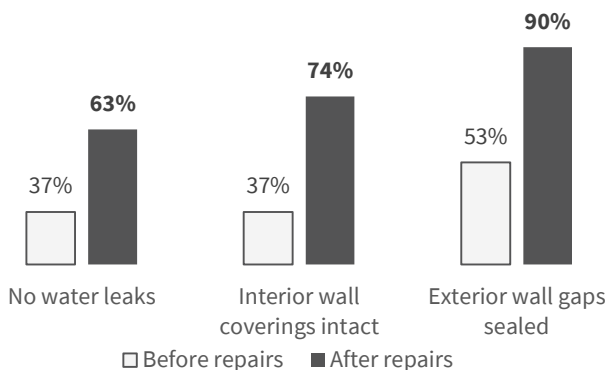
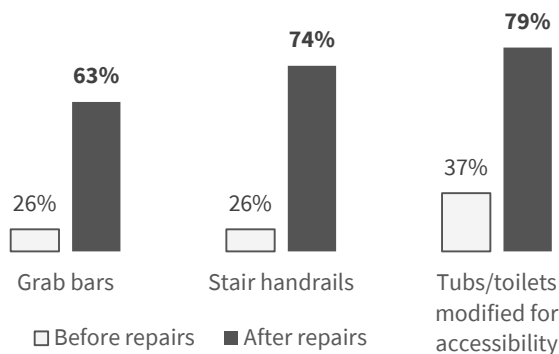
100%

of homeowners who did not think it was easy to get in and out of their house prior to repairs **felt entrance/exit was easier** after RTSEM's intervention

PHYSICAL HEALTH AND INDEPENDENCE

40%

of homeowners who said they fell or had a close call in the six months before repairs reported **a zero or low chance of falling** six months after repairs



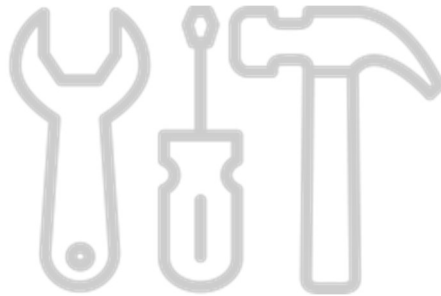
100%

of respondents who said their health had changed as a result of RTSEM's repairs reported **improved health** in the six months after repairs

MENTAL HEALTH AND COMMUNITY

90%

of the most stressed respondents reported a **decrease in their frequency of feeling stressed about repairs** six months after RTSEM's repair work



75%

of all survey respondents said they felt **stressed about home repairs and maintenance less often** after receiving services from RTSEM. Meanwhile, 44% felt more confident in their ability to cope with life's stressors.

Confidence in ability to cope with stress

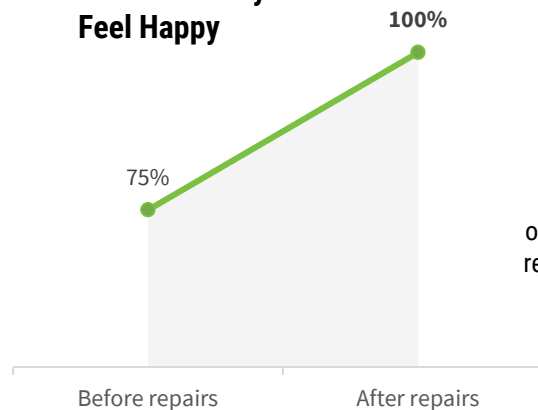
Already confident
44%

More confident than before
44%

88%

of survey respondents said they felt **prouder of their home** six months after RTSEM's repair work, and **100% felt happier**

Often or Always Feel Happy



50%

of the least well-connected respondents reported **feeling more connected to their neighbors** six months after RTSEM's repair work

ECONOMIC SECURITY

100%

of respondents who did not feel their home was a particularly valuable financial asset before repairs indicated **that their home was a more valuable financial asset** six months after RTSEM's repair work

How valuable did/do you feel your home was/is as a financial asset?

